## 1

## SEQUENCE LISTING

COPY OF PAPERS ORIGINALLY FILED

<110> LAZDUNSKI, MICHEL
 LAMBEAU, GERARD
 VALENTIN, EMMANUEL

<120> CLONING AND RECOMBINANT EXPRESSION OF MAMMALIAN GROUP XII SECRETED PHOSPHOLIPASE A2

<130> 1479-R-00

<140> 09/975,374

<141> 2001-10-11

<150> 60/239,489

<151> 2000-10-11

<160> 18

<170> PatentIn Ver. 2.1

<210> 1

<211> 716

<212> DNA

<213> Homo sapiens

<220>

<221> CDS

<222> (121)..(690)

<223> cDNA coding the human group XII sPLA2

<400> 1

atatggaget gget	tgctgcc aagtccgggg	cccgcgccgc tgc	ctagcgc gtcct	gggga 60
ctctgtgggg acg	cgccccg cgccgcggct	cggggacccg taga	agecegg egetge	egege 120
	c tog ogo oco gog o u Ser Arg Pro Ala Lo 5			
	c agg tgc cag gag ca l Arg Cys Gln Glu G 29	ln Ala Gln Thr		
	g acc atc cgg aac gg s Thr Ile Arg Asn G 40			
	c ttg gac ctc ctg g a Leu Asp Leu Leu G 55		- :	
	t gac gga tct aag c r Asp Gly Ser Lys P 70		Tyr Gly Tyr 1	

	ccc Pro	tcc Ser	cca Pro	ccg Pro	aat Asn 85	gga Gly	tgt Cys	ggc Gly	tct Ser	cca Pro 90	ctg Leu	ttt Phe	ggt Gly	gtt Val	cat His 95	ctt Leu	408
	aac Asn	att Ile	ggt Gly	atc Ile 100	cct Pro	tcc Ser	ctg Leu	aca Thr	aag Lys 105	tgt Cys	tgc Cys	aac Asn	caa Gln	cac His 110	gac Asp	agg Arg	456
	tgc Cys	tat Tyr	gag Glu 115	acc Thr	tgt Cys	ggc Gly	aaa Lys	agc Ser 120	aag Lys	aat Asn	gac Asp	tgt Cys	gät Asp 125	gaa Glu	gaa Glu	ttc Phe	504
	cag Gln	tat Tyr 130	tgc Cys	ctc Leu	tcc Ser	aag Lys	atc Ile 135	tgc Cys	cga Arg	gat Asp	gta Val	cag Gln 140	aaa Lys	aca Thr	cta Leu	gga Gly	552
	cta Leu 145	act Thr	cag Gln	cat His	gtt Val	cag Gln 150	gca Ala	tgt Cys	gaa Glu	aca Thr	aca Thr 155	gtg Val	gag Glu	ctc Leu	ttg Leu	ttt Phe 160	600
	gac Asp	agt Ser	gtt Val	ata Ile	cat His 165	tta Leu	ggt Gly	tgt Cys	aaa Lys	cca Pro 170	tat Tyr	ctg Leu	gac Asp	agc Ser	caa Gln 175	cga Arg	648
	gcc Ala	gca Ala	tgc Cys	agg Arg 180	tgt Cys	cat His	tat Tyr	gaa Glu	gaa Glu 185	aaa Lys	act Thr	gat Asp	ctt Leu	taa			690
	agga	gate	icc č	gacag	gctag	gt ga	içaga	ı									716
<210> 2 <211> 189 <212> PRT <213> Homo sapiens																	
	<400 Met 1		Leu	Leu	Ser 5	Arg	Pro	Ala	Leu	Thr 10	Leu	Leu	Leu	Leu	Leu 15	Met	
	Ala	Ala	Val	Val 20	Arg	Cys	Gln	Glu	Gln 25 <sub>.</sub>	Ala	Gln	Thr	Thr	Asp 30	Trp	Arg	
	Ala	Thr	Leu 35	Lys	Thr	Ile	Arg	Asn 40	Gly	Val	His	Lys	Ile 45	Asp	Thr	Tyr	
	Leu	Asn 50	Ala	Ala	Leu	Asp	Leu 55	Leu	Gly	Gly	Glu	Asp 60	Gly	Leu	Cys	Gln	
	Tyr 65	Lys	Cys	Ser	Asp	Gly 70	Ser	Lys	Pro	Phe	Pro 75	Arg	Tyr	Gly	Tyr	Lys 80	
	Pro	Ser	Pro	Pro	Asn 85	Gly	Cys	Gly	Ser	Pro 90	Leu	Phe	Gly	Val	His 95	Leu	
	Asn	Ile	Gly	Ile 100	Pro	Ser	Leu	Thr	Lys 105	Cys	Cys	Asn	Gln	His 110	Asp	Arg	

Cys Tyr Glu Thr Cys Gly Lys Ser Lys Asn Asp Cys Asp Glu Glu Phe 120 Gln Tyr Cys Leu Ser Lys Ile Cys Arg Asp Val Gln Lys Thr Leu Gly Leu Thr Gln His Val Gln Ala Cys Glu Thr Thr Val Glu Leu Leu Phe Asp Ser Val Ile His Leu Gly Cys Lys Pro Tyr Leu Asp Ser Gln Arg 170 Ala Ala Cys Arg Cys His Tyr Glu Glu Lys Thr Asp Leu 180 <210> 3 <211> 35 <212> DNA <213> Artificial Sequence <223> Description of Artificial Sequence: Primer 35 tttgcggccg catatggagc tggctgctgc caagt <210> 4 <211> 37 <212> DNA <213> Artificial Sequence <220> <223> Description of Artificial Sequence: Primer <400> 4 37 tttaagcttc tagaatctgt cactagctgt cggcatc <210> 5 <211> 42 <212> DNA <213> Artificial Sequence <220> <223> Description of Artificial Sequence: Primer tttggatcca tcgaaggtcg tcaggagcag gcccagaccg ac 42 <210> 6 <211> 20 <212> DNA

<213> Artificial Sequence

```
<220>
<223> Description of Artificial Sequence: Primer
<400> 6
gcctttccca cgttatggtt
                                                                        20
<210> 7
<211> 20
<212> DNA
<213> Artificial Sequence
<223> Description of Artificial Sequence: Primer
<400> 7
                                                                        20
ggatgtggct ctccactgtt
<210> 8
<211> 5
<212> PRT
<213> Artificial Sequence
<223> Description of Artificial Sequence: Primer
<400> 8
Gly Cys Gly Ser Pro
 1
<210> 9
<211> 8
<212> PRT
<213> Artificial Sequence
<220>
<223> Description of Artificial Sequence: Consensus
      sequence
<220>
<221> MOD RES
<222> (3)..(4)
<223> Any amino acid
<220>
<221> MOD RES
<222> (7)
<223> Any amino acid
<400> 9
Cys Cys Xaa Xaa His Asp Xaa Cys
<210> 10
```

. . . .

<211> 182

<212> PRT <213> Murine sp.

<400> 10

Ser Pro Ala Leu Leu Leu Leu Leu Leu Leu Ala Thr Ala Arg Gly Gln
1 5 10 15

Glu Gln Asp Gln Thr Thr Asp Trp Arg Ala Thr Leu Lys Thr Ile Arg
20 25 30

Asn Gly Ile His Lys Ile Asp Thr Tyr Leu Asn Ala Ala Leu Asp Leu 35 40 45

Leu Gly Gly Glu Asp Gly Leu Cys Gln Tyr Lys Cys Ser Asp Gly Ser 50 55 60

Lys Pro Val Pro Arg Tyr Gly Tyr Lys Pro Ser Pro Pro Asn Gly Cys
65 70 75 80

Gly Ser Pro Leu Phe Gly Val His Leu Asn Ile Gly Ile Pro Ser Leu 85 90 95

Thr Lys Cys Cys Asn Gln His Asp Arg Cys Tyr Glu Thr Cys Gly Lys 100 105 110

Ser Lys Asn Asp Cys Asp Glu Glu Phe Gln Tyr Cys Leu Ser Lys Ile 115 120 125

Cys Arg Asp Val Gln Lys Thr Leu Gly Leu Ser Gln Asn Val Gln Ala 130 135 140

Cys Glu Thr Thr Val Glu Leu Leu Phe Asp Ser Val Ile His Leu Gly
145 150 155 160

Cys Lys Pro Tyr Leu Asp Ser Gln Arg Ala Ala Cys Trp Cys Arg Tyr
165 170 175

Glu Glu Ile Thr Asp Leu 180

<210> 11

<211> 165

<212> PRT

<213> Rattus sp.

<400> 11

Gln Asp Gln Thr Thr Asp Trp Arg Ala Thr Leu Lys Thr Ile Arg Asn
1 5 10 15

Gly Ile His Lys Ile Asp Thr Tyr Leu Asn Ala Ala Leu Asp Leu Leu 20 25 30

Gly Gly Glu Asp Gly Leu Cys Gln Tyr Lys Cys Ser Asp Gly Ser Lys

Pro Ala Pro Arg Tyr Gly Tyr Lys Pro Ser Pro Pro Asn Gly Cys Gly 50 55 60

Ser Pro Leu Phe Gly Val His Leu Asn Ile Gly Ile Pro Ser Leu Thr 65 70 75 80

Lys Cys Cys Asn Gln His Asp Arg Cys Tyr Glu Thr Cys Gly Lys Gly 85 90 95

Lys Asn Asp Cys Asp Glu Glu Fhe Gln Ser Cys Leu Ser Lys Ile Cys 100 105 110

Arg Asp Val Gln Lys Thr Leu Gly Leu Ser Gln Asn Val Gln Ala Cys 115 120 125

Glu Thr Thr Val Glu Leu Leu Phe Asp Ser Val Ile His Leu Gly Cys 130 135 140

Lys Pro Tyr Leu Asp Ser Gln Arg Ala Ala Cys Trp Cys Arg Tyr Glu 145 150 155 160

Glu Lys Thr Asp Leu 165

<210> 12

<211> 136

<212> PRT

<213> Bovine sp.

<400> 12

Asn Ala Ala Leu Asp Leu Leu Gly Gly Glu Asp Gly Leu Cys Gln Tyr

1 5 10 15

Lys Cys Ser Asp Gly Ser Lys Pro Phe Pro Arg Tyr Gly Tyr Lys Pro

Ser Pro Pro Asn Gly Cys Gly Ser Pro Leu Phe Gly Val His Leu Asn 35 40 45

Ile Gly Ile Pro Ser Leu Thr Lys Cys Cys Asn Gln His Asp Arg Cys 50 55 60

Tyr Glu Thr Cys Gly Lys Ser Lys Asn Asp Cys Asp Glu Ala Phe Gln 65 70 75 80

Ser Cys Leu Ser Lys Ile Cys Arg Asp Val Gln Lys Thr Leu Gly Leu 85 90 95

Ala Gln His Val Gln Ala Cys Glu Thr Thr Val Glu Leu Leu Phe Asp 100 105 110

Ser Val Ile His Leu Gly Cys Lys Pro Tyr Leu Asp Ser Gln Arg Ala 115 120 125

Ala Cys Arg Cys Arg Tyr Glu Glu 130 135 <210> 13 <211> 194 <212> PRT

<213> Xenopus sp.

<400> 13

Met Arg Phe Arg Gly Phe Leu Tyr Val Leu Trp Phe Ala Tyr Cys Ala

Pro Arg Phe Ser His Gln Glu Pro Trp His Gln Ser Asp Gln Gln Pro

Glu Thr Pro Asp Trp Arg Met Thr Leu Lys Thr Ile Arg Asn Gly Val

His Lys Ile Asp Met Tyr Leu Asn Ala Leu Asp Leu Leu Gly Gly 50

Ala Asp Gly Leu Cys His Tyr Glu Cys Arg Asp Gly Ser Lys Pro Val

Pro Arg Tyr Gly Tyr Arg Pro Ser Pro Pro Asn Gly Cys Gly Ser Pro

Val Phe Gly Val His Asp Ile Gly Ile Pro Ser Met Thr Lys Cys

Asn Gln His Asp Arg Cys Tyr Asp Ser Cys Gly Ile Met Lys Asn Asp 120

Cys Asp Glu Glu Phe Gln Asn Cys Leu Ser Lys Ile Cys Arg Asp Val

Gln Lys Thr Leu Gly Ile Ser Glu Thr Val Gln Ala Cys Glu Thr Thr

Val Gly Leu Leu Phe Asp Ala Val Ile His Leu Gly Cys Lys Pro Tyr 170

Leu Glu Ser Gln Arg Ala Ala Cys Ile Cys Gln Tyr Glu Glu Lys Ile

Asp Leu

<210> 14

<211> 37

<212> PRT

<213> Homo sapiens

<400> 14

Glu Tyr Asn Asn Tyr Gly Cys Tyr Cys Gly Leu Gly Gly Ser Gly Thr

Pro Val Asp Glu Leu Asp Lys Cys Cys Gln Thr His Asp Asn Cys Tyr

Asp Gln Ala Lys Lys
-35

<210> 15

<211> 43

<212> PRT

<213> Homo sapiens

<400> 15

Trp Thr Met Pro Gly Thr Leu Trp Cys Gly Val Gly Asp Ser Ala Gly
1 5 10 15

Asn Ser Ser Glu Leu Gly Val Phe Gln Gly Pro Asp Leu Cys Cys Arg 20 25 30

Glu His Asp Arg Cys Pro Gln Asn Ile Ser Pro 35 40

<210> 16

<211> 38

<212> PRT

<213> Conus magus

<220>

<221> MOD\_RES

<222> (15)

<223> Any amino acid

<220>

<221> MOD\_RES

<222> (21)

<223> Any amino acid

<400> 16

Leu Cys Lys Ile Asn Ser Asn Ala Cys Ser Val Pro Phe Ser Xaa Ile 1 5 10 15

Pro Cys Gln Lys Xaa Phe Leu Ala Ala Cys Asp Arg His Asp Thr Cys

Tyr His Cys Gly Lys His

<210> 17

<211> 41

<212> PRT

<213> Oryza sativa

<400> 17

Pro Leu Leu Arg Tyr Gly Lys Tyr Cys Gly Ile Leu Tyr Ser Gly Cys
1 5 10 15

Pro Gly Glu Arg Pro Cys Asp Ala Leu Asp Ala Cys Cys Met Val His

Asp His Cys Val Asp Thr His Asn Asp 35 40

<210> 18

<211> 41

<212> PRT

<213> Homo sapiens

<400> 18

Tyr Lys Pro Ser Pro Pro Asn Gly Cys Gly Ser Pro Leu Phe Gly Val

His Leu Asn Ile Gly Ile Pro Ser Leu Thr Lys Cys Cys Asn Gln His 20 25 30

Asp Arg Cys Tyr Glu Thr Cys Gly Lys 35 40